# STATE OF UTAH **DIVISION OF WATER QUALITY** DEPARTMENT OF ENVIRONMENTAL QUALITY SALT LAKE CITY, UTAH

#### AUTHORIZATION TO DISCHARGE UNDER THE UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES)

In compliance with provisions of the Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated ("UCA") 1953, as amended (the "Act"),

#### PARK CITY MUNICIPAL CORPORATION

is hereby authorized to discharge from its drinking water treatment system, near the Judge Tunnel portal in Empire Canyon, Park City, Utah to receiving waters named

#### EMPIRE CREEK, TO SILVER CREEK, THENCE THE WEBER RIVER

in accordance with discharge point, effluent limitations, monitoring requirements and other conditions set forth herein.

27 October , 2014.

Walter L. Baker, P.E.

Director

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# I. DISCHARGE - LIMITATIONS AND REPORTING REQUIREMENTS

#### A. <u>Description of Discharge Point</u>

The authorization to discharge provided under this permit is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under a Utah Pollutant Discharge Elimination System permit are violations of the *Act* and may be subject to penalties under the *Act*. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge may be subject to criminal penalties as provided under the *Act*.

Outfall Number	Location of Discharge Point
001	The discharge is from a fourteen inch goose neck pipe at latitude 40° 37' 37.6", and longitude 111° 30' 10.56", discharging directly into Empire Canyon Creek. Samples will be collected in the chlorine building adjacent to Empire Canyon Creek from the pipe that is connected to, and an extension of the goose neck pipe.
002	The discharge is from a one inch pipe located at latitude 40° 37' 38.05" and longitude 111° 30" 9.85', discharging directly into Empire Canyon Creek.

#### B. Narrative Standard.

It shall be unlawful, and a violation of this permit, for the permittee to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum, or other nuisances such as color, odor or taste, or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by a bioassay or other tests performed in accordance with standard procedures.

# C. Specific Limitations and Monitoring Requirements.

# 1. Toxicity Limitations for Outfall 001 and Outfall 002.

Effective in accordance with the Stipulated Consent Order Docket # M14-01, incorporated by reference herein there shall be no acute or chronic toxicity in the discharge as defined in *Part V.* and determined by test procedures described in *Part I.C. 2 & 3* of this permit.

2. Discharge Water - Limitations, Monitoring and Compliance Schedule.

Permittee is authorized to discharge from Outfall 001 and Outfall 002. As the discharge from Outfall 002 will consist of residual drainage from the piping of Outfall 001, the discharge from Outfall 002 will be considered to be of the same quality as that of Outfall 001. As such, the periodic monitoring shown in Table 2 below, with the exception of an estimated average quarterly flow, will not be required for Outfall 002, unless specifically required by the Director. In accordance with the dates identified in the Stipulated Consent Order, Docket #M14-01, Outfall 001 and 002 will be subject to the discharge parameter limitations in Table 1 below, in accordance with the dates outlined in the Stipulated Consent Order. Monitoring and reporting only will be required during the duration of this permit term, at the frequencies shown in Table 2 below.

Table 1, Future Effluent Limitation	Table 1, Future Effluent Limitations for Outfalls 001 a/b/ and 002 a/b/				
Parameter	Maximum Monthly Average	Daily Minimum	Daily Maximum		
T-41D 11 A C 0					
Total Recoverable Antimony, ug/l Based Human Health Criteria					
Table 2.14.6	5.6	NIA	NTA.		
Total Recoverable Cadmium, ug/l	5.6	NA	NA		
Based on 3A	.42	NA	2.0		
Total Recoverable Lead, ug/l	.42	IVA	3.9		
Monthly average based 3A, daily max based					
on 1C	6.8	NA	15.0		
Total Recoverable Mercury, ug/l	0.0	1471	13.0		
Monthly average based 3A, daily max based					
on 1C	0.012	NA	2.0		
Total Recoverable Zinc, ug/l					
Based on 3A	198	NA	198		
TSS, mg/l					
Based on BPJ and secondary treatment					
standards	25	NA	35		
pH, Standard Units					
Based on Secondary treatment standards	NA	6.5	9.0		
Dissolved Oxygen, mg/l					
Based on 3A	NA	5	NA		
Chronia Diamonitarina	NIA	NIA	D /E 11		
Chronic Biomonitoring	NA	NA	Pass/Fail		

NA – Not Applicable.

a/ Final effluent limitations for Outfalls 001 and 002 will become effective in a future permit in accordance with the Stipulated Compliance Order, Docket #M14-01.

b/ By January 1, 2016 Park City will implement best management practices (BMPs) to minimize the discharge of metals at the Empire site, to be in operation in the interim period until the SCO deadlines are achieved. Such BMPs will include measures to minimize solids in the discharge of Judge water at the site by primary screening, enhancing the settling of solids in the Empire Tank and revising the piping configuration at the site so that all water will be subject to enhanced settling before discharge. Enhanced settling will not include chemical addition. During this interim period the discharge will be sampled once each quarter that a discharge occurs for all parameters in Table 2 below.

# Starting immediately and lasting throughout the permit term, Outfall 001 is subject to the Self-Monitoring and Reporting Requirements in Table 2 below:

Table 2, Self-Monitoring and Reporting Requirements for Outfall 001					
Parameter	Frequency	Sample Type	Units		
Flow a/	Continuous	Recorder	MGD		
Total Recoverable Antimony	Quarterly	Composite	ug/L		
Total Recoverable Cadmium	Quarterly	Composite	ug/L		
Total Recoverable Lead	Quarterly	Composite	ug/L		
Total Recoverable Mercury	Quarterly	Composite	ug/L		
Total Recoverable Zinc	Quarterly	Composite	ug/L		
Phosphorus	Quarterly	Composite	ug/L		
TSS	Quarterly	Composite	mg/L		
Dissolved Oxygen	Quarterly	Grab	mg/l		
pH	Quarterly	Grab	Standard Units		
District to be a second of the			Pass/Fail IC		
	Two tests in		25 > 100%		
Chronic Biomonitoring	permit term b/	Grab	effluent		

a/ An estimated daily average flow, over the reporting period, from both outfalls combined, must be reported.

b/ Two chronic WET tests will be performed during the permit term on effluent from a pilot scale treatment plant of representative effluent from the blended Judge and Spiro feedwaters. The blended feeds will be representative of actual ratios of feedwaters from the two tunnels that will result from the management configuration of the finished treatment project for both tunnel effluent streams. One WET test will be performed during the high flow Spring period and the other separated by approximately six months during the low flow Fall period. The chronic test will be run on the two species, Ceriodaphnia dubia (water flea) and Pimephales promelas (fathead minnow). The chronic WET tests will be done in accordance with Section I. 3. B). If toxicity is detected no further investigation or testing will be required during this permit period.

# 3. Chronic Whole Effluent Toxicity Testing.

The following procedural requirements in Section I. 3. are included to comply with the EPA requirement that permit limits must be included in permits where the compliance schedule will extend beyond the term of the permit.

#### a) Whole Effluent Testing – Chronic Toxicity.

Starting at the same time that future effluent limits are in effect, the permittee shall conduct quarterly chronic toxicity tests on a composite sample of the final effluent. The samples shall be collected at 001. If chronic toxicity is detected, the test shall be repeated in less than four weeks from the date the initial sample was taken. If the second test shows no chronic toxicity, routine monitoring shall be resumed. A pattern of chronic toxicity is established if the second test (or two chronic tests in a row) show toxicity. The need for any additional samples, and/or a Preliminary Toxicity Investigation or a Toxicity Reduction Evaluation, see *Part I.C.3 c, & d.*, shall be determined by the Director

The chronic toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, 4<sup>th</sup> Edition, (EPA 821/R-02-013), October 2002 as per 40 Code of Federal Regulations 136.3(a) TABLE 1A-LIST OF APPROVED BIOLOGICAL METHODS). Test species shall consist of Ceriodaphnia dubia and Pimephales promelas (fathead minnow). A CO<sub>2</sub> atmosphere may be used (in conjunction with an unmodified test) in order to account for artificial pH drift, as previously demonstrated to and authorized by the Director.

Chronic toxicity occurs when the IC25 is less than or equal to an effluent concentration of 100%. If any of the acceptable control performance criteria are not met, the test shall be considered invalid.

Quarterly test results shall be reported along with the Discharge Monitoring Report submitted for the end of the reporting calendar quarter (e.g., biomonitoring results for the calendar quarter ending March 31 shall be reported with the discharge monitoring reports due April 28, with the remaining biomonitoring reports submitted with discharge monitoring reports, due each July 28, October 28, and January 28). All test results shall be reported along with the discharge monitoring reports submitted for that reporting period. The format for the report shall be consistent with the latest revision of the *Region VIII Guidance for Chronic Whole Effluent Reporting* and shall include all the physical testing as specified.

If the results for a minimum of ten consecutive tests indicate no chronic toxicity, the permittee may request a reduction in testing frequency and/or

reduction to one species. The Director may approve, partially approve, or deny the request based on results and other available information. If approval is given, the modification will take place without a public notice.

The current Utah whole effluent toxicity policy is in the process of being updated and revised to assure its consistency with the Environmental Protection Agency's national and regional whole effluent toxicity policy. When said revised whole effluent toxicity policy has been finalized and officially adopted, this permit will be reopened and modified to incorporate satisfactory follow-up chronic toxicity language (chronic pattern of toxicity, preliminary toxicity investigation, toxicity identification evaluation and toxicity reduction evaluation, etc.) without a public notice, as warranted and appropriate.

- b) Accelerated Testing. When **toxicity** is indicated during routine biomonitoring as specified in this permit, the permittee shall notify the Director in writing within five (5) days after becoming aware of the test result. The permittee shall perform an accelerated schedule of biomonitoring to establish whether a pattern of toxicity exists as detailed above.
- c) Preliminary Toxicity Investigation.
  - (1) When a pattern of toxicity is detected the permittee will notify the Director in writing within five (5) days and begin an evaluation of the possible causes of the toxicity. The permittee will have fifteen (15) working days from demonstration of the pattern to complete a preliminary toxicity investigation and submit a written report of the results to the Director. The preliminary toxicity investigation may include, but is not limited to, additional chemical and biological monitoring, examination of pretreatment program records, examination of discharge monitoring reports, a thorough review of the testing protocol, evaluation of treatment processes and chemical use, inspection of material storage and transfer areas to determine if a spill may have occurred, and similar procedures.
  - (2) If the preliminary toxicity investigation identifies a probable toxicant and/or a probable source of toxicity the permittee shall submit, as part of its final results written notification of that effect to the Director. Within thirty (30) days of completing the preliminary toxicity investigation the permittee shall submit for approval a control program to control effluent toxicity and shall proceed to implement such a plan within seven (7) days following approval. The control program, as submitted to or revised by the Director, may be incorporated into the permit.
  - (3) If no probable explanation for toxicity is identified in the preliminary toxicity investigation, the permittee shall notify the Director as part of its

final report, along with a schedule for conducting a Phase I toxicity reduction evaluation (See *Part I.C.3.d*, *Toxicity Reduction Evaluation*).

- (4) If toxicity spontaneously disappears during the toxicity reduction evaluation, the permittee shall submit written notification to that effect to the Director as part of the reporting requirements of paragraph a, of this section (Whole Effluent Testing Chronic Toxicity).
- d) Toxicity Reduction Evaluation. If toxicity is detected during the life of this permit and it is determined by the Director that a toxicity reduction evaluation is necessary, the permittee shall be so notified and shall initiate a toxicity reduction evaluation immediately thereafter. The purpose of the toxicity reduction evaluation will be to establish the cause of toxicity, locate the source(s) of the toxicity, and control or provide treatment for the toxicity.

A toxicity reduction evaluation may include but is not limited to one, all, or a combination of the following:

- (5) Phase I Toxicity Characterization
- (6) Phase II Toxicity Identification Procedures
- (7) Phase III Toxicity Control Procedures
- (8) Any other appropriate procedures for toxicity source elimination and control.

If the toxicity reduction evaluation establishes that the toxicity cannot be immediately eliminated, the permittee shall submit a proposed compliance plan to the Director. The plan shall include the proposed approach to control toxicity and a proposed compliance schedule for achieving control. If the approach and schedule are acceptable to the Director, this permit may be reopened and modified.

If the toxicity reduction evaluation shows that the toxicity is caused by a toxicant(s) that may be controlled with specific numerical limitations, the permittee may:

- (a) Submit an alternative control program for compliance with the numerical requirements.
- (b) If necessary, provide a modified biomonitoring protocol, which compensates for the pollutant(s) being controlled numerically.

If acceptable to the Director, this permit may be reopened and modified to incorporate any additional numerical limitations, a

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modified compliance schedule if judged necessary by the Director, and/or a modified biomonitoring protocol.

Failure to conduct an adequate toxicity reduction evaluation, or failure to submit a plan or program as described above, or the submittal of a plan or program judged inadequate by the Director, shall be considered a violation of this permit.

### D. Reporting of Wastewater Monitoring Results.

1. Monitoring results obtained during the previous quarter shall be summarized for each quarter and reported on a DMR Form (EPA No. 3320-1), post-marked no later than the 28<sup>th</sup> day of the month following the completed reporting period. Lab sheets for biomonitoring must be attached to the biomonitoring Discharge Monitoring Report forms. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports shall be signed and certified in accordance with the requirements of *Signatory Requirements (Part V.G.)*, and submitted by NetDMR, or submitted to the Division of Water Quality at the following address:

Original to:

Department of Environmental Quality

Division of Water Quality 195 North 1950 West PO Box 144870

Salt Lake City, Utah 84114-4870

#### II. MONITORING, RECORDING & GENERAL REPORTING REQUIREMENTS

#### A. Representative Sampling.

Samples taken in compliance with the monitoring requirements established under Part I shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.

#### B. Monitoring Procedures.

Monitoring must be conducted according to test procedures approved under *Utah Administrative Code R317-2-10* unless other test procedures have been specified in this permit.

#### C. Penalties for Tampering.

The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

#### D. Compliance Schedules.

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.

#### E. Additional Monitoring by the Permittee.

If the permittee monitors any parameter more frequently than required by this permit, using test procedures approved under *Utah Administrative Code R317-2-10* or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharge monitoring form. Such increased frequency shall also be indicated. Only those parameters required by the permit need to be reported.

#### F. Records Contents.

Records of monitoring information shall include:

- 1. The date, exact place, and time of sampling or measurements:
- 2. The individual(s) who performed the sampling or measurements;
- 3. The date(s) and time(s) analyses were performed;
- 4. The individual(s) who performed the analyses;
- 5. The analytical techniques or methods used; and,
- 6. The results of such analyses.

#### G. Retention of Records.

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring

instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time. A copy of this Utah Pollutant Discharge Elimination System permit must be maintained on site during the duration of activity at the permitted location.

#### H. Twenty-four Hour Notice of Noncompliance Reporting.

- 1. The permittee shall (orally) report any noncompliance including transportation accidents, spills, and uncontrolled runoff from biosolids transfer or land application sites which may seriously endanger health or environment, as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of circumstances. The report shall be made to the Division of Water Quality, (801) 536-4300, or 24-hour answering service (801) 536-4123.
- 2. The following occurrences of noncompliance shall be reported by telephone (801) 536-4123 as soon as possible but no later than 24 hours from the time the permittee becomes aware of the circumstances:
- a) Any noncompliance which may endanger health or the environment;
- b) Any unanticipated bypass, which exceeds any effluent limitation in the permit (See Part III.G, Bypass of Treatment Facilities.);
- c) Any upset which exceeds any effluent limitation in the permit (See *Part III.H*, *Upset Conditions.*);
- d) Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit; or,
- 3. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
- a) A description of the noncompliance and its cause;
- b) The period of noncompliance, including exact dates and times;
- c) The estimated time noncompliance is expected to continue if it has not been corrected:
- d) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and,

- e) Steps taken, if any, to mitigate the adverse impacts on the environment and human health during the noncompliance period.
- 4. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Division of Water Quality, (801) 536-4300.
- 5. Reports shall be submitted to the addresses in *Part I.D*, *Reporting of Monitoring Results*.

#### I. Other Noncompliance Reporting.

Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for *Part I.D* are submitted. The reports shall contain the information listed in *Part II H* 3.

#### J. Inspection and Entry.

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, including but not limited to, collection, storage facilities or area, transport vehicles and containers.
- 4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the *Act*, any substances or parameters at any location.
- 5. The permittee shall make the necessary arrangements with the landowner or leaseholder to obtain permission or clearance, the Director, or authorized representative, upon the presentation of credentials and other documents as may be required by law, will be permitted to enter without delay for the purposes of performing their responsibilities.

#### III. COMPLIANCE RESPONSIBILITIES

#### A. <u>Duty to Comply.</u>

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

#### B. Penalties for Violations of Permit Conditions.

The *Act* provides that any person who violates a permit condition implementing provisions of the *Act* is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions or the Act is subject to a fine not exceeding \$25,000 per day of violation. Any person convicted under *Utah Administrative Code 19-5-115(2)* a second time shall be punished by a fine not exceeding \$50,000 per day. Except as provided at *Part III.G*, *Bypass of Treatment Facilities* and *Part III.H*, *Upset Conditions*, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

#### C. Need to Halt or Reduce Activity not a Defense.

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### D. Duty to Mitigate.

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or prevent any land application in violation of this permit.

#### E. Proper Operation and Maintenance.

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

#### F. Removed Substances.

Collected screening, grit, solids, sludge, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not directly enter either the final effluent or waters of the state by any other direct route.

#### G. Bypass of Treatment Facilities.

Bypass Not Exceeding Limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to *paragraph 2 and 3* of this section.

# 2 Prohibition of Bypass.

- a) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
  - 1) Bypass was unavoidable to prevent loss of human life, personal injury, or severe property damage;
  - 2) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance, and
  - 3) The permittee submitted notices as required under *section III.G.3*.
- b) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed in sections III.G.2.a (1), (2) and (3).
- c) The Director has approved the following categories of allowed infrequent bypasses, which meet the criteria identified in section III.G.2.a. if such bypasses will occur for no more than a cumulative 30 days in a calendar year. Any bypasses that exceed the 30 day cumulative maximum in a calendar year must be approved in writing by the Director in response to a written request by the permittee which fully documents the circumstances, cause and need for the bypass. Such bypasses must meet the criteria identified in Section III. G. 2.a). The permittee shall still comply with the notice requirements of section III.G.2.a for any such bypasses:
  - (1) Bypass necessitated by mine tunnel collapse or other major incident affecting the mine tunnel or flow of water from it;
  - (2) Bypass necessitated by flooding caused by excessively high flows from mine tunnel;
  - (3) Bypass necessitated by demolition and construction necessary to install treatment facilities needed to meet final

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effluent or drinking water standards; and

(4) Bypass necessitated by mine tunnel maintenance and repair.

#### Notice.

- a) Anticipated bypass. Except as provided above in *section III.G.2* and below in *section III.G.3.b*, if the permittee knows in advance of the need for a bypass, it shall submit prior notice, at least ninety days before the date of bypass. The prior notice shall include the following unless otherwise waived by the Director:
  - 1) Evaluation of alternative to bypass, including cost-benefit analysis containing an assessment of anticipated resource damages:
  - 2) A specific bypass plan describing the work to be performed including scheduled dates and times. The permittee must notify the Director in advance of any changes to the bypass schedule;
  - 3) Description of specific measures to be taken to minimize environmental and public health impacts;
  - 4) A notification plan sufficient to alert all downstream users, the public and others reasonably expected to be impacted by the bypass;
  - 5) A water quality assessment plan to include sufficient monitoring of the receiving water before, during and following the bypass to enable evaluation of public health risks and environmental impacts; and,
  - 6) Any additional information requested by the Director.
- b) Emergency Bypass. Where ninety days advance notice is not possible, the permittee must notify the Director, and the Director of the Department of Natural Resources, as soon as it becomes aware of the need to bypass and provide to the Director the information in *section III.G.3.a.(1) through (6)* to the extent practicable.
- c) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass to the Director as required under *Part II.H*, Twenty Four Hour Reporting. The permittee shall also immediately notify the Director of the Department of Natural Resources, the public and downstream users and shall implement measures to minimize impacts to public health and environment to the extent practicable.

#### H. <u>Upset Conditions</u>.

- 1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Paragraph 2 of this section are met. Director's administrative determination regarding a claim of upset cannot be judiciously challenged by the permittee until such time as an action is initiated for noncompliance.
- 2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a) An upset occurred and that the permittee can identify the cause(s) of the upset;
  - b) The permitted facility was at the time being properly operated;
  - c) The permittee submitted notice of the upset as required under *Part II.H*, *Twenty-four Hour Notice of Noncompliance Reporting*; and,
  - d) The permittee complied with any remedial measures required under *Part III.D*, *Duty to Mitigate*.
- 3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

#### I. Toxic Pollutants.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of *The Water Quality Act of 1987* for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

#### J. Changes in Discharge of Toxic Substances.

Notification shall be provided to the Director as soon as the permittee knows of, or has reason to believe:

- 1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - a) One hundred micrograms per liter (100 ug/L);
  - b) Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

- c) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with *Utah Administrative Code R317-8-3.5(7)* or (10); or,
- d) The level established by the Director in accordance with *Utah Administrative Code R317-8-4.2(6)*.
- 2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - a) Five hundred micrograms per liter (500 ug/L);
  - b) One milligram per liter (1 mg/L) for antimony:
  - c) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with *Utah Administrative Code R317-8-3.5(9)*; or,
  - d) The level established by the Director in accordance with *Utah Administrative Code R317-8-4.2(6)*.

#### K. Industrial Pretreatment.

Any wastewaters discharged to the sanitary sewer, either as a direct discharge or as a hauled waste, are subject to Federal, State and local pretreatment regulations. Pursuant to Section 307 of *The Water Quality Act of 1987*, the permittee shall comply with all applicable federal General Pretreatment Regulations promulgated at 40 CFR 403, the State Pretreatment Requirements at *Utah Administrative Code R317-8-8*, and any specific local discharge limitations developed by the Publicly Owned Treatment Works accepting the wastewaters.

In addition, in accordance with 40 CFR 403.12(p)(1), the permittee must notify the public owned treatment works, the EPA Regional Waste Management Director, and the State hazardous waste authorities, in writing, if they discharge any substance into a Utah Administrative Code public owned treatment works which if otherwise disposed of would be considered a hazardous waste under 40 Code of Federal Regulation 261. This notification must include the name of the hazardous waste, the EPA hazardous waste number, and the type of discharge (continuous or batch).



#### IV. GENERAL REQUIREMENTS

#### A. <u>Planned Changes</u>.

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of parameters discharged or pollutant sold or given away. This notification applies to pollutants, which are not subject to effluent limitations in the permit. In addition, if there are any planned substantial changes to the permittee's existing sludge facilities or their manner of operation or to current sludge management practices of storage and disposal, the permittee shall give notice to the Director of any planned changes at least 30 days prior to their implementation.

#### B. Anticipated Noncompliance.

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

#### C. Permit Actions.

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

# D. <u>Duty to Reapply</u>.

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit.

#### E. Duty to Provide Information.

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

#### F. Other Information.

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts or information.

#### G. Signatory Requirements.

All applications, reports or information submitted to the Director shall be signed and certified.

- 1. All permit applications shall be signed by either a principal executive officer or ranking elected official.
- 2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- a) The authorization is made in writing by a person described above and submitted to the Director, and,
- b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
- 3. Changes to authorization. If an authorization under *paragraph IV.G.2* is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of *paragraph IV.G.2*. must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
- 4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

#### H. Penalties for Falsification of Reports.

The *Act* provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$10,000.00 per violation, or by imprisonment for not more than six months per violation, or by both.

#### I. Availability of Reports.

Except for data determined to be confidential under *Utah Administrative Code R317-8-3.2*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of the Director. As required by the *Act*, permit applications, permits and effluent data shall not be considered confidential.

#### J. Oil and Hazardous Substance Liability.

Nothing in this permit shall be construed to preclude the permittee of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the *Act*.

#### K. <u>Property Rights</u>.

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

#### L. Severability.

The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

#### M. Transfers.

This permit may be automatically transferred to a new permittee if:

- 1. The current permittee notifies the Director at least 20 days in advance of the proposed transfer date;
- 2. The notice includes a written agreement between the existing and new permittee's containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,
- 3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.

#### N. State Laws.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by *Utah Administrative Code 19-5-117*.

#### O. Water Quality - Reopener Provision.

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations and compliance schedule, if necessary, if one or more of the following events occurs:

- 1. Water Quality Standards for the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.
- 2. A revision to the current Water Quality Management Plan is approved and adopted which calls for different effluent limitations than contained in this permit.

#### P. <u>Toxicity Limitation - Reopener Provision</u>.

This permit may be reopened and modified (following proper administrative procedures) to include whole effluent toxicity testing, a whole effluent toxicity testing limitation, a compliance schedule, a compliance date, additional or modified numerical limitations, or any other conditions related to the control of toxicants if toxicity is detected during the life of this permit.

#### Q. Storm Water-Reopener Provision.

At any time during the duration (life) of this permit, this permit may be reopened and modified (following proper administrative procedures) as per *Utah Administrative Code R317.8*, to include, any applicable storm water provisions and requirements, a storm water pollution prevention plan, a compliance schedule, a compliance date, monitoring and/or reporting requirements, or any other conditions related to the control of storm water discharges to "waters-of-State".

#### V. DEFINITIONS

- 1. The "7-day (and weekly) average", other than for e-coli bacteria, fecal coliform bacteria, and total coliform bacteria, is the arithmetic average of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. Geometric means shall be calculated for e-coli bacteria, fecal coliform bacteria, and total coliform bacteria. The 7-day and weekly averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week, which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains Saturday.
- 2. The "30-day (and monthly) average," other than for e-coli bacteria, fecal coliform bacteria and total coliform bacteria, is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. Geometric means shall be calculated for e-coli bacteria, fecal coliform bacteria and total coliform bacteria. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.
- 3. "Act," means the *Utah Water Quality Act*.
- 4. "Bypass," means the diversion of waste streams from any portion of a treatment facility.
- 5. "Chronic toxicity" occurs when the inhibitory concentration to 25% of the population (IC25) is less than or equal to 100% effluent.
- 6. "Composite Samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:
  - a) Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
  - b) Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;

- c) Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "X" gallons of flow); and,
- d) Continuous sample volume, with sample collection rate proportional to flow rate.
- 7. "CWA," means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.
- 8. "Daily Maximum" (Daily Max.) is the maximum value allowable in any single sample or instantaneous measurement.
- 9. "Director" means Director of the Division of Water Quality.
- 10. "EPA," means the United States Environmental Protection Agency.
- 11. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
- 12. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
- 13. "Severe Property Damage," means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 14. "Upset," means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

		E.	

# FACT SHEET/STATEMENT OF BASIS PARK CITY MUNICIPAL CORPORATION UPDES PERMIT NO. UT-0025925 JUDGE TUNNEL NEW PERMIT MAJOR INDUSTRIAL

#### **FACILITY CONTACT**

Clint McAffee, P.E. Water and Streets Director 1053 Iron Horse Drive P.O. Box 1480 Park City, Utah 84060-1480 (435) 615-5339

#### DESCRIPTION AND PAST HISTORY OF THE FACILITY

The Daly-Judge Company began construction of the Judge Tunnel (originally known as the Anchor Tunnel) in 1886 to drain groundwater from the various Ontario Mine shafts. By 1889 the tunnel reached as far back as 5,800 feet into the mountain. This water has been drained (discharged) from the mine for well over 100 years. The Ontario Mine extracted precious metals and operated up until the early 1980s. The mine tunnel is now operated by Park City Municipal Corporation and the flow is used as a culinary water source. The water drains into a collection line and flows to the Park City Municipal Corporation Empire Water Storage Tank, which is capable of holding up to one million gallons of water. If the supply exceeds the demand, or if the turbidity meter determines the water exceeds the Park City established standard of 0.5 nephelometric turbidity units as a drinking water Maximum Contaminant Level, or for other water quality reasons, the water bypasses the chlorine disinfection system and the tank and is discharged into Empire Creek. If the water is needed, and meets the drinking water standards and Park City water quality goals, the water flows into the disinfection system and into the water tank to be distributed throughout the western part of the Park City Municipal Corporation culinary water system.

Water discharged from mines, is considered a "point source" as defined by the "Clean Water Act." The operator of the point source is required to get a National Pollutant Discharge Elimination System or "NPDES" permit, which is known in Utah as a Utah Pollutant Discharge Elimination System or "UPDES" permit. *Utah Administrative Code R317-8-3.1 (3)*. Park City submitted its application in July 2011 and updated the application in February 2012.

#### BACKGROUND AND PURPOSE OF THE PERMIT

A Total Maximum Daily Load or "TMDL" study on cadmium and zinc for Silver Creek was approved by EPA on August 4, 2004. The primary source areas for these pollutants are mining-related tailings within and along the stream channel. The TMDL identified specific source areas located in four stream reaches. Reach 1 (Above Park City) includes the Judge and Spiro mine tunnels and mine-related tailings. The TMDL estimated the contribution of zinc from Judge Tunnel to be less than 100 pounds/year, while the total zinc load from all reaches was calculated to be 37,146 lbs. per year. Because Judge was determined to be a minor contributor of zinc and cadmium, the TMDL did not calculate a specific load allocation for this source. Rather, the

TMDL recommended the use of best management practices (BMPs) and a recalculation of the load limits once a 75% load reduction from the legacy mine tailings was achieved. Significant reductions from the non-point sources have been achieved and remedial activities are currently ongoing in the Silver Creek watershed. The timing of the permit and compliance schedule is in alignment with the goals of the TMDL.

Silver Creek was listed in Utah's 2008 303(d) list for arsenic and total dissolved solids. A TMDL has not yet been completed for these constituents. A quantitative reasonable potential analysis conducted for these constituents in the Judge Tunnel discharge found no reasonable potential to exceed water quality standards. As such, these constituents will not be added to the permit.

Due to drinking water quality challenges, Park City is currently unable to utilize Judge Tunnel water as a drinking water source. Further, Park City is not in a position to treat Judge Tunnel immediately (as evidenced in the companion Stipulated Consent Order (SCO), Docket No. M14-01) until infrastructure can be constructed to provide conveyance and treatment at the Spiro Water Treatment Plant (SWTP) site or at the existing Quinn's Junction Water Treatment Plant (QJWTP). As such, all of the Judge Tunnel water is presently being discharged into Empire Creek. This current and historic discharge configuration is not preferred, because Empire Creek is a tributary to Silver Creek which is impaired for zinc and cadmium. There is additional concern that discharge of Judge water into Empire Creek would continue to add metals into Silver Creek and/or compromise the pending cleanup effort of lower Silver Creek

It is Park City's goal to utilize Judge Tunnel water as soon and as much as possible, although realizing this goal is dependent on many factors not within Park City's control, including future drinking water quality standards, the water chemistry in the area, and changes inside the mining tunnels.

Park City is currently constructing the Judge Tunnel Pipeline (JTPL), which will convey Judge Tunnel water to the vicinity of the existing SWTP. This pipeline is part of the long term infrastructure plan needed to treat Judge Tunnel water to comply with this UPDES permit and achieve drinking water standards and Park City's water quality goals. JTPL will be completed by November 1, 2015 as stated in the SCO. If Park City determines the existing treatment process at SWTP to be suitable to meet Park City's drinking water goals with minor modifications, and drinking water standards, water characteristics and operational conditions remain favorable, Park City may elect to treat a portion of Judge water for drinking water use at the existing SWTP at any time during the permit period. In addition, Park City will implement certain Best Management Practices (BMP) improvements at the Empire Canyon facility which would improve its solids removal capability, and thus the quality of any discharge at that facility. These two actions would serve to further the purpose of the TMDL by reducing the quantity, and improving the quality of the discharge into Empire Creek, before final compliance is achieved per the SCO.

All Judge water not utilized at SWTP would be discharged at the Empire facility, resulting in only de-minimus discharges into McLeod Creek, if at all. As such, the quality of water discharged at Spiro into the McLeod/East Canyon system would not be altered or compromised from the current situation. Full treatment and compliance with the Judge and Spiro UPDES permits will occur at a later date as stipulated by the SCO. It is anticipated that upon achievement of full compliance at the end of the SCO compliance schedule, no discharges, beyond those

allowed in the Drinking Water Facility General Permit, will be necessary or allowed at the Empire Facility. As such, significant discharges into the Silver Creek system will cease and this Judge Tunnel permit can be terminated.

#### DESCRIPTION OF OUTFALLS 001 AND 002

There are two discharge points from the Park City Municipal Corporation (PCMC) drinking water treatment facility at the Judge Tunnel location which historically flow intermittently and which require an individual UPDES permit. Outfall 001 is a fourteen inch diameter "gooseneck" pipe and is the main discharge point. This outfall flows when the quantity of intake water exceeds the drinking water system demand or is otherwise not needed for drinking water use, or the turbidity or a contaminant parameter of the intake water exceeds drinking water standards or Park City water quality goals. The flow from the Judge Tunnel varies from year to year due to what type of water year the area is having, among other factors. Tunnel flows may range between 700 gallons per minute to as high as 2,500 gallons per minute. During the drier months of nearly every year, the Judge Tunnel bypass flow may be the only water in the headwaters of Empire Creek. The calculated "maximum design flow" is 2,000 gallons per minute. The latitude of Outfall 001 is 40° 37' 37.6", and longitude 111° 30' 10.56".

Outfall 002 is a one inch diameter pipe that drains the gooseneck of Outfall 001. When the gooseneck discharge stops flowing, Outfall 002 drains the gooseneck to prevent damage from freezing. The maximum design flow of Outfall 002 is approximately ten gallons per minute when flowing. Therefore, since the water from Outfalls 001 and 002 is the same water, PCMC will not be required to monitor Outfall 002, nor be required to perform whole effluent toxicity tests on Outfall 002. The latitude of Outfall 002 is 40° 37' 38.05", and longitude 111° 30' 9.85".

There are three other discharge points associated with the Judge Tunnel/Empire Tank drinking water system:

- 1. The 1" diameter drain from the turbidity meter discharge flows about 7 gallons per hour for proper turbidity meter operation. This is the same water being sampled from Outfall 001.
- 2. The floor drain from the chlorination building, which discharges alongside the turbidity meter drain.
- 3. The 10" diameter gooseneck pipe which discharges from both the Empire Tank over flow and tank drain connections.

With the exception of the turbidity meter drain, the discharge points 2 and 3 described above seldom discharge and, along with the turbidity meter discharge, are considered to exert a minor impact to the receiving water and are considered to be part of the general maintenance and upkeep of the Park City Municipal Corporation drinking water system. These (1-3 above) are, therefore, permitted under the Utah Pollutant discharge Elimination System, General Drinking Water permit (permit number UTG-640044), which allows discharges for maintenance, emergency discharges, and cleaning, as needed. It will be required that, when Park City performs improvements to the water facility at the Empire Canyon/Judge Tunnel site, the turbidity meter drain, chlorine building floor drain and Empire storage tank overflow line will be relocated to discharge to a confined seepage pit, and not directly to Empire Canyon Creek.

The outfalls identified in this permit may need to be modified either in this permit term or in a

future permit term as the terms of the SCO allow for Judge Tunnel waters to be conveyed to and addressed at other Park City Municipal treatment locations. A permit modification or permit revision as a part of a renewal will be required to accommodate this anticipated change.

#### DESCRIPTION OF MINE DISCHARGE WATER SOURCE

The feed water to the PCMC drinking water treatment facility is groundwater that infiltrates into, and then discharges from the Judge Tunnel portal directly upstream of the facility. It then flows through a short pipeline to the drinking water facility. However, based on a recent order (August 27, 2012) from the Division of Drinking Water, none of the Judge Tunnel water is being utilized in the Park City Drinking Water system but is being discharged through Outfalls 001 and 002 into Empire Canyon, a tributary of Silver Creek. The data submitted with the permit application shows the discharge at Outfall 001 is exceeding water quality standards for certain heavy metals.

#### RECEIVING WATERS AND STREAM CLASSIFICATION

The receiving streams are Empire Canyon Creek, to Silver Creek, thence the Weber River. Under *Utah Administrative Code R317-2-6*, the beneficial use designations for Empire Creek, Silver Creek and the Weber River are *1C*, *2B*, *3A* and 4.

Class 1C - Protected for domestic use purposes, with prior treatment by processes as required by the Utah Division of Drinking Water.

Class  $2\vec{B}$  - Protected for secondary contact recreation such as boating, wading, or similar uses.

Class 3A - Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.

Class 4 - Protected for agricultural uses including irrigation of crops and stock watering.

#### BASIS FOR EFFLUENT LIMITATIONS

During much of the year, there is little or no natural base flow in the Empire Creek, the discharge from the Judge Tunnel becomes the dominant flow in the headwaters of Empire Creek. Therefore, with little or no natural dilution potential, the stream standards found in *Utah Administrative Code R317-2-14*, *Numeric Criteria for Aquatic Wildlife*, *Numeric Criteria for Human Health Standards*, and *Numeric Criteria Irrigation Standards* are the basis for the effluent limitations for the following parameters: antimony, cadmium, lead, mercury, dissolved oxygen, and zinc. The limitations on pH and total suspended solids are based on current Utah Secondary Treatment Standards, *Utah Administrative Code R317-1-3.2*. The monitoring and flow requirements are based on DWQ memo: *Monitoring, Recording and Reporting Guidelines, December 1, 1991*.

#### **Reasonable Potential Analysis**

Park City has collected a number of water quality samples from the Spiro Tunnel discharge. Samples were analyzed for the following constituents: aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, cyanide, hexavalent chromium, trivalent chromium,

iron, lead, magnesium, mercury, nickel, selenium, silver, zinc, thallium, strontium, tritium, total uranium, uranium-234, uranium-235, uranium-238, radium, gross alpha, gross beta, total biochemical oxygen demand, calcium, total suspended solids, total dissolved solids, turbidity, hardness, E. Coli, nitrate, and phosphorus. An average hardness of 181 mg/l was used to determine the applicable hardness-dependent water quality standards.

A quantitative reasonable potential analysis (RP) was performed on each constituent to determine if there was reasonable potential for the discharge to exceed the applicable water quality standards. Based on the RP analysis, the following parameters exceeded the most stringent chronic water quality standard or were determined to have a reasonable potential to exceed the standard: Antimony, Cadmium, Lead, Mercury, and Zinc. As such, these parameters were included with future effluent limitations in the permit.

The 7-day 10-year low flow condition (7Q10) in the receiving water was determined to be 0 at the discharge point. As a result, no dilution/mixing zone was used in developing water quality standards for proposed effluent limits and reasonable potential analysis. End of pipe standards were applied.

#### SPECIFIC LIMITATIONS AND MONITORING REQUIREMENTS

In accordance with the May 10, 2007 EPA Memorandum: "Compliance Schedules for Water Quality Based Effluent Limitations in NPDES Permits", which requires that effluent limits must be put into permits where the compliance schedule may extend beyond the permit term, final limits are included in this permit. These limits will come into effect in the future, as required in the companion document, Stipulated Consent Order (SCO) Docket No.M14-01, agreed to by Park City and the DWQ, as explained below. The schedule for compliance with these limits is contained in the separate SCO to facilitate coordination of the compliance schedules for multiple UPDES permits. During the duration of this permit term and future permit terms within the compliance periods outlined in the SCO, monitoring only will be required at the frequencies shown in Table 2.

To bring these two (Outfalls 001 and 002) discharge points into compliance with *Utah Administrative Code R317-2-14* will require substantial time and resources due to the significant challenges Park City Municipal Corporation is faced with. Along with the complex problems of the Judge Tunnel discharge, the problems are compounded due to the Spiro Tunnel mine drain discharge problems which are very similar to the Judge Tunnel Mine Drain Tunnel. Park City Municipal Corporation will likely have to change its present management of the discharge, through movement of the outfalls and/or implementation of treatment of the discharge. As this will involve complex decisions with regard to treatment, management, and other funding issues to come into compliance with the permit limits above. Park City has elected to achieve NPDES compliance for the Judge Tunnels in accordance with an "Integrated Plan" consistent with EPA's May 2012 *Integrated Municipal Stormwater and Wastewater Planning Approach Framework* ("*Integrated Framework*)" memo. The Division of Water Quality has concurred that the use of an Integrated Framework would be appropriate to achieve compliance.

The limits included in this permit are in compliance with WQS and the TMDL, they also represent water quality targets to enable future treatment process design. These limits may be subject to revision in the future, should new information become available, or site conditions

change.

Table 1, Future Effluent Limitation	ons for Outfalls 00	11 <sup>a/b/</sup> and 002 <sup>a/b/</sup>	
Parameter	Maximum Monthly Average	Daily Minimum	Daily Maximum
Total Recoverable Antimony, ug/l			
Based Human Health Criteria Table 2.14.6	5.6	NTA.	27.4
	5.6	NA	NA
Total Recoverable Cadmium, ug/l Based on 3A	40	N.T.A	2.0
	.42	NA	3.9
Total Recoverable Lead, ug/l			
Monthly average based 3A, daily max based on 1C	6.8	NT A	15.0
Total Recoverable Mercury, ug/l	0.8	NA	13.0
Monthly average based 3A, daily max based			
on 1C	0.012	NA	2.0
Total Recoverable Zinc, ug/l	0.012	IVA	2.0
Based on 3A	198	NA	198
TSS, mg/l	170	1 17 1	170
Based on BPJ and secondary treatment			
standards	25	NA	35
pH, Standard Units		1,1,2	
Based on Secondary treatment standards	NA	6.5	9.0
Dissolved Oxygen, mg/l			
Based on 3A	NA	5	NA
Chronic Piemonitoring	NIA	NIA	Daga/Es !1
Chronic Biomonitoring	NA	NA	Pass/Fa

NA – Not Applicable.

BPJ – Best Professional Judgment: The permits writer's best judgment based upon standard industry practices and site specific conditions.

a/ The limits in Table 1 are not in effect during this permit term, and will become effective as detailed in the Stipulated Consent Order Docket # M14-01, incorporated by reference herein.

b/ By January 1, 2016 Park City will implement best management practices (BMPs) to minimize the discharge of metals at the Empire site, to be in operation in the interim period until the SCO deadlines are achieved. Such BMPs will include measures to minimize solids in the discharge of Judge water at the site by primary screening, enhancing the settling of solids in the Empire Tank and revising the piping configuration at the site so that all water will be subject to enhanced settling before discharge. Enhanced settling will not include chemical addition. During this interim period the discharge will be sampled once each quarter that a discharge occurs for all parameters in Table 2 below.

Starting immediately and lasting throughout this permit term, Park City is required to monitor and report quarterly on the discharge from Outfall 001, as required in Table 2 below, for the purpose of gaining more data on the quality of the discharge. The discharge from Outfall 002 is considered to be of the same quality, so no separate monitoring of that outfall is required. In the future, when the effluent limits are in effect, effluent sampling will likely be required at a higher frequency.

Table 2, Self-Monitoring and Reporting Requirements for Outfall 001						
Parameter	Frequency	Sample Type	Units			
Flow <u>a</u> /	Continuous	Recorder	MGD			
Total Recoverable Antimony	Quarterly	Composite	ug/L			
Total Recoverable Cadmium	Quarterly	Composite	ug/L			
Total Recoverable Lead	Quarterly	Composite	ug/L			
Total Recoverable Mercury	Quarterly	Composite	ug/L			
Total Recoverable Zinc	Quarterly	Composite	ug/L			
Phosphorus	Quarterly	Composite	ug/L			
TSS	Quarterly	Composite	mg/L			
Dissolved Oxygen	Quarterly	Grab	mg/l			
pH	Quarterly	Grab	Standard Units			
SALED HOLD THE RESERVE OF THE SALED	Till the state of		IC 25 > 100%			
	2 tests in		effluent			
Chronic Biomonitoring	permit term <sup>b/</sup>	Grab	Pass/Fail			

a/ An estimated total daily average flow, over the reporting period, from both outfalls combined, must be reported.

b/ Two chronic WET tests will be performed during the permit term on effluent from a pilot scale treatment plant of representative effluent from the blended Judge and Spiro feedwaters. The blended feeds will be representative of actual ratios of feedwaters from the two tunnels that will result from the management configuration of the finished treatment project for both tunnel effluent streams. One WET test will be performed during the high flow Spring period and the other separated by approximately six months during the low flow Fall period. The chronic test will be run on the two species, Ceriodaphnia dubia (water flea) and Pimephales promelas (fathead minnow). The chronic WET tests will be done in accordance with Section I. 3. B). If toxicity is detected no further investigation or testing will be required during this permit period.

#### ANTI-DEGRADATION POLICY

Under *Utah Administrative Code R317-2-3.5.8.d.* An Anti-degradation Level II Review will be required by the Director of the Division of Water Quality for discharges to waters with a Class 1C drinking water use assigned. Since Park City is discharging into a tributary of a Class 1C drinking water source, Park City will be required to conduct an Anti-degradation Level II Review. Park City has submitted a Level II ADR with a preliminary analysis of alternatives for the purposes of this permit. This review will help Park City decide what the City needs to do to come into compliance with the effluent limitations above, and is part of the 'Stipulated Compliance Order'. More complete alternatives' analyses and updated ADRs, if needed, will be

submitted by Park City at a future time as specified in the Stipulated Compliance Order.

#### REPORTING

The permit will require reports to be submitted quarterly on Discharge Monitoring Report forms or by NetDMR electronically for each quarterly reporting period, all due by the 28<sup>th</sup> day of the month following the reporting period. Lab sheets for biomonitoring must be attached to the biomonitoring Discharge Monitoring Report forms.

#### STORM WATER

According to *Utah Administrative Code R317-8-3.9* this facility will not be required to maintain coverage under the UPDES multi-sector general permit for discharges associated with industrial activity, permit number *UTR000000*, *Sector G (Metal Mine Facilities l Industry, SIC Major Group 10)*. This is because the storm water will not likely come in contact with, or be contaminated by any overburden, raw material, intermediate product, finished product, by product, or waste product located on the site of the operation.

# **BIOMONITORING REQUIREMENTS**

A nationwide effort to control toxic discharges where effluent toxicity is an existing or potential concern is regulated in accordance with the State of Utah Permitting and Enforcement Guidance Document for Whole Effluent Toxicity (WET) Control (biomonitoring). Authority to require effluent biomonitoring is provided in Permit Conditions, *Utah Administrative Code* R317-8-4.2, Permit Provisions, *Utah Administrative Code* R317-8-5.3 and Water Quality Standards, *Utah Administrative Code* R317-2-5 and R317-2-7.2.

Since the Judge Tunnel discharges are to drinking water source (Class 1C), and a cold water fishery (Class 3A) waters, and the current effluent concentration of a few parameters appear unable to meet the effluent limitations for Table 1, there is reasonable potential for toxicity to exist in the discharge of Outfall 001. However, the expected chemistry of the effluent is expected to change in the future as this discharge may be combined with another water source (Spiro Tunnel) and/or treatment may be provided. Data collected on chronic WET testing, which would be a report only requirement during this permit term based on the SCO, will be conducted during pilot testing of Spiro and/or a combination of Judge and Spiro waters. This testing will be for two species, Ceriodaphnia dubia (water flea) and Pimephales promelas (fathead minnow) conducted for each test as detailed in the permit. No additional follow—up testing process will be required during this permit term.

Although they won't go into effect during this permit term, the requirements for a full chronic WET testing process are also included in this permit to conform to the EPA requirement that all future permit limits must be included in permits where the compliance schedules will extend beyond the permit term. At this time acute WET testing is not considered to be necessary in future permits, however, use of acute WET testing may be considered in future permits if the need for such testing is identified.

As this project includes a long term compliance schedule, it is recommended that such similar abbreviated WET testing be conducted at the beginning of each five-year permit cycle to track

long term trends in toxicity, until more rigorous testing may be required when the full effluent limits become effective.

#### **PERMIT DURATION**

It is recommended this permit be effective for the duration of five years from the effective date of issuance.

Drafted by:
John Kennington, UPDES Engineering Section Manager
Dave Wham, UPDES Engineering Section
Utah Division of Water Quality,
August 26, 2014

#### **PUBLIC NOTICE**

Began: August 30, 2014 Ended: September 30, 2014

Public Noticed in the Park Record

A single comment was received during the public notice period requesting a listing of the specific constituents on which reasonable potential analysis was conducted. This detail was added to the Statement of Basis/Fact Sheet. The additional information was of a clarifying/informational nature and did not warrant any substantive changes to the permit.

Signed this 27th day of Other, 2014.

John Kennington, UPDES Eng. Section Mgr.

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# UTAH DIVISION OF WATER QUALITY

IN THE MATTER OF
Judge Tunnel and Spiro Tunnel UPDES
Park City Municipal Corporation
445 Marsac Ave.
P.O. Box 1480
Park City, Utah

**DOCKET NUMBER M14-01** 

STIPULATED COMPLIANCE ORDER

# **PURPOSE**

1. The purpose of this STIPULATED COMPLIANCE ORDER ("AGREEMENT") is to specify a compliance schedule for the PARK CITY MUNICIPAL CORPORATION ("OPERATOR") to come into full compliance with the final effluent limits that will be in the Utah Pollutant Discharge Elimination System ("UPDES") discharge permits for the Judge Tunnel and Spiro Tunnel, UPDES permits #UT0025925 and #UT0025941. The permits and this AGREEMENT are expected to be finalized concurrently, subject to public comment and other requirements of the Utah Water Quality Act, Title 19 Chapter 5 of the Utah Code ("ACT"), and Rule 317 of the Utah Admin. Code and other applicable law. The compliance schedule extends beyond the expiration dates of the permits. This AGREEMENT is expected to be incorporated by reference into the permits and into future renewal permits.

# **AUTHORITY**

- 2. The **DIRECTOR** of the **UTAH DIVISION OF WATER QUALITY** ("**DIVISION**") is authorized to issue, continue in effect, renew, revoke, modify or deny discharge permits and to issue orders in accordance with Section 19-5-106, and to specify a schedule of compliance in a permit leading to compliance with the **ACT** pursuant to Rule 317-8-5.2.
- 3. The **DIVISION** was created to administer the **ACT** under the immediate direction and control of the **DIRECTOR** pursuant to Section 19-1-105 of the Utah Code.
- 4. The State of Utah has been delegated authority by the U.S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program under the Federal Clean Water Act (CWA), known in Utah as UPDES.

#### **FINDINGS**

5. **OPERATOR** operates a municipal water system in Park City, Utah. Under certain agreements with the owner of historic mine tunnels, known as the Judge Tunnel and Spiro

Tunnel, **OPERATOR** manages the water draining from the Judge Tunnel and Spiro Tunnel, to provide domestic water to its water system customers. Excess tunnel waters are discharged into adjacent water courses, including Empire Canyon Creek and the Spiro North and East ditches. These waters eventually discharge into McLeod, East Canyon and Silver Creeks. *See* Park City February 7, 2012, updated application for a UPDES permit in the administrative record.

- 6. As of 2009, EPA Region 8 and the **DIVISION** have directed **OPERATOR** to obtain UPDES permits for Judge Tunnel and Spiro Tunnel. In July 2011, **OPERATOR** submitted initial applications to the **DIVISION** for UPDES permits at each source. The **OPERATOR** has requested compliance schedules to come into compliance with the final effluent limits that will be established in the UPDES permits. Pursuant to Rule 317-8-5.2, a "permit may, when appropriate, specify a schedule of compliance leading to compliance..." with the **ACT**. The purpose of this **AGREEMENT** is to specify compliance schedules that will be incorporated into the UPDES permits.
- 7. On June 5, 2012, EPA issued the *Integrated Municipal Stormwater and Wastewater Planning Approach Framework* ("*Integrated Framework*") dated May 2012. The *Integrated Framework* allows a municipality to identify its relative priorities for infrastructure projects required by the Clean Water Act, balancing human health and water quality impacts with financial capability. A copy of the Integrated Framework is in the administrative record.
- 8. **OPERATOR** represents that compliance schedules are appropriate to meet permit effluent limits at Judge Tunnel and Spiro Tunnel, because the complex nature of the water sources, the existing water system, local conditions and climate, and financial constraints require time to develop a plan to treat each source, as needed, including time to analyze the feasibility and desirability of integrating treatment for the sources. **OPERATOR** has also represented that compliance will require **OPERATOR** to construct several miles of pipeline through challenging mountain town topography and treatment systems for some or all of the sources and that **OPERATOR** requires time to raise funds through water rate increases to acquire land, design, construct and operate treatment facilities.
- 9. **OPERATOR** represents that it will develop and implement a plan under the *Integrated Framework*, generally, by addressing discharges at the Judge Tunnel first, completing a Sampling and Analysis Plan and water quality modeling and other studies to characterize the Spiro Tunnel watershed, and conducting engineering feasibility analysis on integrating Judge Tunnel and Spiro Tunnel water sources for treatment, distribution and discharge in the vicinity of Spiro Tunnel, including potentially expanding the capacity and upgrading the process of the existing Quinns Junction Water Treatment Plant ("QJWTP") or Spiro Water Treatment Plant ("SWTP") as may be required by an integrated approach. See **OPERATOR's** *Expanded Draft Outline for Park City Municipal Corporation Integrated NPDES Plan* in the administrative

record. OPERATOR's Expanded Draft Outline for Park City Municipal Corporation Integrated NPDES Plan is modeled after EPA's Integrated Framework. The Expanded Draft Outline for Park City Municipal Corporation Integrated NPDES Plan describes the water quality improvements expected from addressing the Judge Tunnel and the financial capability of the OPERATOR to address the discharges in total, especially Spiro Tunnel, which is anticipated to be the most costly source due to its size and importance to OPERATOR'S water system. The **OPERATOR** has also represented that the activities and facilities contemplated by **OPERATOR** to achieve compliance with UPDES permit requirements are expected to be costly (tens of millions of dollars), are expected to have a significant permanent impact on OPERATOR'S construction, operation, maintenance, and replacement expenses far into the future, and will be funded entirely by existing and future water rate payers. OPERATOR has represented that it anticipates significant annual water rate increases for several years to pay for the required new facilities. The OPERATOR has also represented that the compliance schedules will allow the OPERATOR to both mitigate the financial impacts of many years of significant water rate increases and reduce pollutant loading in the Silver Creek, McLeod Creek and East Canyon watersheds from the Spiro and Judge Tunnel discharges. The financial representations of the OPERATOR are also in the OPERATOR's May 23, 2013 Analysis of the Financial Impact of Alternative UPDES Compliance Schedules with 12-30-13 updated Table 10 in the administrative record.

10. The DIRECTOR finds there is adequate support in the administrative record as described above to reasonably find that the compliance schedule will lead to compliance with the effluent limitations that will be in the permits to meet water quality standards by the end of the compliance schedule, that the compliance schedule is appropriate given the circumstances, that compliance will be achieved as soon as possible, and that the OPERATOR cannot immediately comply with the final effluent limits that will be in the permits.

# **AGREEMENT**

11. **THE DIRECTOR HEREBY ORDERS** and the **OPERATOR** agrees to the following compliance schedules:

# Final Park City Municipal Corporation Integrated NPDES Plan

A. No later than December 31, 2015, **OPERATOR** agrees to complete and submit to the **DIVISION** for approval, the *Park City Municipal Corporation Integrated NPDES Plan ("Integrated Plan")*. The scope of the *Integrated Plan* shall include descriptions of all projects and work necessary, in as much detail as is known at the time, to bring all surface water discharges from the Judge and Spiro Tunnels into compliance with their associated UPDES permits, with schedules and deadlines consistent with those in this **AGREEMENT**. The *Integrated Plan* shall be modeled after the *Integrated Municipal* 

Stormwater and Wastewater Planning approach Framework attached to the June 5, 2012 memorandum from EPA Administrators Nancy Stoner and Cynthia Giles.

Through the end of the term of this AGREEMENT, OPERATOR agrees to submit to the DIVISION combined routine *Integrated Plan and construction project* updates and addenda every April 1 and October1 when project construction is in progress, and annually on October 1, when project construction is not in progress. The reports, at a minimum, will document any changes or updates to the *Integrated Plan*, a summary of progress and milestones achieved in all construction, study and design projects during the previous reporting period, projected progress and milestones scheduled to be completed during the following reporting period, and if the project(s) are on schedule. The reports will also include any revisions to the **OPERATOR's** Level II Antidegradation Review for the Judge and Spiro Tunnel discharges, if needed.

#### Judge Tunnel Pipeline and Empire Tank and Site Improvements

- B. No later than 30 days after the execution of this **AGREEMENT**, **OPERATOR** agrees to submit to the **DIVISION** a complete, detailed scope of work and engineering and construction plans for the Empire Tank discharge site improvements, and a pipeline from the vicinity of the Judge Tunnel portal to the vicinity of the SWTP. **OPERATOR** agrees to complete this construction by November 1, 2015.
- C. No later than December 31, 2017, **OPERATOR** agrees to submit to the **DIVISION** a detailed engineering and financial analysis of the options for compliance with the effluent limits for water from the Judge Tunnel identified in the Judge permit. This analysis shall include the identification of **OPERATOR'S** intended option for treatment of water from the Judge Tunnel, as well as an assessment of feasible options to minimize bypass for reasonably foreseeable bypass scenarios.
  - 1. If **OPERATOR** determines in the December 31, 2017 analysis above that the best means of treating Judge Tunnel water to meet effluent limits would be to send the water to and treat it at the QJWTP (hereinafter, "QJWTP Solution"), it shall provide, no later than December 31, 2018, a complete, detailed scope of work and engineering and construction plans for the construction of the continuation of the Judge Tunnel pipeline from the vicinity of the SWTP to the QJWTP, expansion of the capacity of the QJWTP and upgrades to the treatment capability of QJWTP to include options such as dewatering to remove solids filtered from Judge Tunnel water, **OPERATOR** agrees to comply with Paragraph 11.D of this **AGREEMENT** (collectively, "the QJWTP solution").

2. If **OPERATOR** determines in the December 31, 2017 analysis that treatment of Judge Tunnel water at SWTP would be technically, operationally, or financially superior to the QJWTP Solution, **OPERATOR** agrees to comply with Paragraph 11.E of this **AGREEMENT** (collectively, "the Interim SWTP solution").

# The QJWTP Solution for Judge Tunnel Water

D. If **OPERATOR** elects to pursue the QJWTP solution, no later than December 31, 2022, **OPERATOR** agrees to complete construction of the continuation of the pipeline from the Judge Tunnel portal to the QJWTP, expansion of the capacity of the QJWTP, and upgrade the treatment capability of QJWTP to include options such as dewatering to remove solids filtered from Judge Tunnel water. At the completion of such construction, all surface water discharges from the Judge Tunnel, associated water treatment facilities and Empire Tank water storage facility shall comply with the final limits in the UPDES permit issued for the Judge Tunnel, except in cases of upset or emergency condition, as described in Rule 317-8-4.1(14), or other circumstances necessary for proper operation, maintenance and replacement of the water system only as allowed in the UPDES permit issued for the Judge Tunnel and the **OPERATOR'S** UPDES General Permit for Drinking Water Treatment Plants.

# The Interim SWTP Solution for Judge Tunnel Water

- E. If **OPERATOR** elects the Interim SWTP solution (defined below), no later than December 31, 2018, **OPERATOR** agrees to submit to the **DIVISION** a complete, detailed scope of work and engineering and construction plans for the expansion of the capacity of the SWTP and upgrades to the treatment capability of SWTP to treat Judge Tunnel water, including options such as dewatering to remove solids filtered from Judge Tunnel water. An Interim SWTP solution is a project which involves a modification or reconstruction of the present SWTP treatment process and facilities to achieve final effluent limits in the UPDES permits for Judge Tunnel water.
  - 1. If **OPERATOR** elects the Interim SWTP solution as the final solution needed to achieve final effluent limits for the Judge Tunnel UPDES permit and such project costs less than \$6 million (including legal, engineering, construction, and other direct costs of the Interim SWTP revision), no later than December 31, 2022, **OPERATOR** agrees to complete construction of the expansion of the capacity of the SWTP, and upgrade the treatment capability of SWTP to include options such as dewatering to remove solids filtered from Judge Tunnel water, if necessary.

- 2. If **OPERATOR** elects the Interim SWTP solution as the final solution needed to achieve final effluent limits for the Judge Tunnel UPDES permit and such project costs more than \$6 million (including legal, engineering, construction, and other direct costs of the Interim SWTP revision), no later than January 1, 2024, **OPERATOR** agrees to complete construction of the expansion of the capacity of the SWTP, and upgrade the treatment capability of SWTP to include options such as dewatering to remove solids filtered from Judge Tunnel water, if necessary.
- 3. The project costs described in this Paragraph 11.E shall be based on the cost estimates provided in the analysis to be provided pursuant to Paragraph 11.C of this **AGREEMENT**.
- 4. At the completion of such construction called for in this Paragraph 11.E, all surface water discharges from the Judge Tunnel, associated water treatment facilities and Empire Tank water storage facility shall comply with final limits in the UPDES permit issued for the Judge Tunnel, except in cases of upset or emergency condition, as described in Rule 317-8-4.1(14), or other circumstances necessary for proper operation, maintenance and replacement of the water system only as allowed in the UPDES permit issued for the Judge Tunnel and the **OPERATOR'S** UPDES General Permit for Drinking Water Treatment Plants.

# Final Judge and Spiro Solution

F. No later than December 31, 2021, **OPERATOR** agrees to submit to the **DIVISION** a complete, detailed engineering and financial analysis of the options for compliance with any permitted effluent limits for water from the Spiro Tunnel and/or the combined Spiro and Judge Tunnel discharge. This analysis shall include the identification of OPERATOR'S intended option for treatment of water from the Spiro Tunnel and/or the combined Spiro and Judge Tunnel discharge, as well as an assessment of feasible options to minimize bypass for reasonably foreseeable bypass scenarios. If no additional revision to the existing SWTP treatment process, beyond the Interim SWTP solution scope of work identified in Paragraph 11.E above, and no further revision of that facility is required to meet water quality standards for any Spiro and/or the combined Spiro and Judge Tunnel discharges, OPERATOR agrees that all discharges related to the Judge and Spiro Tunnels will comply with the final effluent limits in the applicable UPDES permits, including applicable General Permits, one year after completion of construction called for in Paragraph 11.E, except in cases of upset or emergency condition, as described in Rule 317-8-4.1(14), or other circumstances necessary for proper operation, maintenance and replacement of the water system only as allowed in

the UPDES permits issued for the Judge & Spiro Tunnels and the **OPERATOR'S** UPDES General Permit for Drinking Water Treatment Plants. Minor construction and revisions to the facility, or the need to construct other major drinking water-related facilities, which are not material in achieving water quality standards, will not delay this deadline to meet water quality discharge standards.

- G. If a 'Major Revision' (defined below), beyond the scope of work described in Paragraph 11.E. above, is needed to meet the final limits in all applicable UPDES permits for all discharges related to the Judge and Spiro Tunnels and all other Park City drinking water system infrastructure, then **OPERATOR** agrees to achieve the deadlines set forth in this Paragraph 11.G. A Major Revision is defined as a project, including land acquisition, with a total cost, including legal, engineering, construction of only the infrastructure which is a direct component of the revision or expansion of facilities needed to meet the final limits of the UPDES Permits, and other direct costs of \$12.5 million or less to complete including the work outlined in Paragraphs 11.D, E, G, and H of this **AGREEMENT**.
- 1. No later than December 31, 2022, **OPERATOR** shall submit construction plans and specifications to the **DIVISION** for such Major Revision.
- 2. No later than January 1, 2025, **OPERATOR** shall complete construction of such Major Revision as the chosen alternative to meet final UPDES permit effluent limits.
- 3. No later than July 1, 2025, **OPERATOR** shall comply with all final UPDES permit limits for all water treatment plant infrastructure if a Major Revision is required to meet all such limits.
- 4. The project costs described in this Paragraph 11.G shall be based on the cost estimates provided in the analysis to be provided pursuant to Paragraph 11.F. of this **AGREEMENT**.
- 5. Notwithstanding any other provision in Paragraph G, **OPERATOR** agrees that the discharges related to Judge Tunnel will comply with applicable UPDES discharge permit limits within the time period (no later than January 1, 2024) stated in Paragraph 11.E.4 of this **AGREEMENT**.
- H. If an 'Extensive Revision' (defined below), beyond the scope of work described in Paragraph 11.E. above, is required to meet the final limits in the applicable UPDES permits for all discharges related to the Judge and Spiro Tunnels and all other Park City drinking water system infrastructure, then **OPERATOR** agrees to achieve the deadlines set forth in this Paragraph 11.H. An Extensive Revision is defined as a project, including

land acquisition, with a total cost, including legal, engineering, construction of only the infrastructure which is a direct component of the revision or expansion of facilities needed to meet the final limits of the UPDES Permits, and other direct costs, of greater than \$12.5 million, including the work outlined in Paragraphs 11.D, E. G. and H. of this **AGREEMENT.** 

- 1. No later than January 1, 2028, **OPERATOR** agrees to submit to the **DIVISION** construction plans and specifications for such Extensive Revision.
- 2. No later than January 1, 2033, **OPERATOR** agrees to complete construction of all remaining facilities needed to achieve final effluent limits for Spiro Tunnel and Judge Tunnel and all other Park City drinking water system related discharges and begin startup and optimization of such treatment facilities.
- 3. No later than July 1, 2033, **OPERATOR** agrees all discharges related to Judge Tunnel and Spiro Tunnel discharges, and all other Park City drinking water infrastructure related discharges will comply with all applicable UPDES discharge permit limits, except in cases of upset or emergency condition, as described in Rule 317-8-4.1(14), or other circumstances necessary for proper operation, maintenance and replacement of the water system only as allowed in the UPDES permits and the **OPERATOR'S** UPDES General Permit for Drinking Water Treatment Plants.
- 4. The project costs described in this Paragraph 11 H. shall be based on the cost estimates provided in the analysis to be provided pursuant to Paragraph 11.F. of this **AGREEMENT**.
- 5. Notwithstanding any other provision in Paragraph H herein, **OPERATOR** agrees that the discharges related to Judge Tunnel will comply with applicable UPDES discharge permit limits within the time period (no later than January 1, 2024) stated in Paragraph 11.E.4 of this **AGREEMENT**.
- 12. Nothing in this **AGREEMENT** shall constitute a waiver by **OPERATOR** of any claims it may have against third parties for costs, damages or other relief associated with pollutants in Judge and Spiro Tunnel discharges. Further, nothing in this **AGREEMENT** shall prohibit or limit in any way **OPERATOR's** ability to seek contribution or cost recovery from third parties under Comprehensive Environmental Response, Compensation and Liability Act, Resource Conservation and Recovery Act, Clean Water Act, or other laws or regulations. **OPERATOR** reserves all rights to any remedy not expressly prohibited by this **AGREEMENT**.
- 13. **OPERATOR** acknowledges that this **AGREEMENT** waives governmental immunity as to the **DIVISION** and State of Utah relating to this **AGREEMENT**. Nevertheless, the

**OPERATOR** is not waiving any defenses or immunity as to any other party that may be available under the Utah Governmental Immunity Act (Chapter 63G-7, Utah Code) nor does the **OPERATOR** waive any limits of liability currently provided by the Utah Governmental Immunity Act. Subject to all provisions of this **AGREEMENT**, and as may be applicable to third parties, nothing herein shall be deemed a waiver by the **OPERATOR** of any immunity provided by law to the **OPERATOR** or an extension of any limits of liability applicable to the **OPERATOR**. This **AGREEMENT** shall not be construed as an **AGREEMENT** to indemnify, hold harmless, or in any way to assume liability for personal injury, death or property damage caused by the negligence of another party.

- 14. **OPERATOR** shall supply to the **DIVISION** all requested information in order to assure compliance with this **AGREEMENT**, the **ACT**, associated rules and permit requirements.
- 15. **OPERATOR** shall perform the requirements of this **AGREEMENT** within the time frames set forth herein except as may be modified in accordance with Rule 317-8-5.6(1)(d) and other applicable law.
- 16. Disputes arising hereunder are subject to Sections 19-5-112, 19-1-301 and 19-1-301.5 of the Utah Code, Rule 305-7 of the Utah Admin. Code, and other applicable law.
- 17. The undersigned representatives certify that they are fully authorized to enter into the terms and conditions of this **AGREEMENT** and to bind the party they represent to this **AGREEMENT**.
- 18. This **AGREEMENT** shall be effective the day upon which it has been fully executed by the parties.

IT IS SO AGREED.

# Park City Municipal Corporation

By:

Clint McAffee, P.E., Water and Streets Director Park City Municipal Corporation

IT IS SO ORDERED.

Walter L. Baker, P.E., Director Utah Division of Water Quality Date: 27 Oct. 2014

Date: August 1, 2014